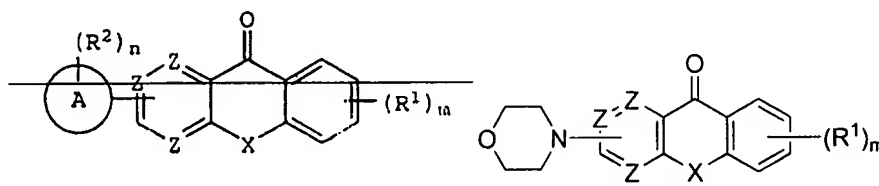


### AMENDMENTS TO THE CLAIMS

Please replace all prior versions and listings of claims in this application with the following claims. Insertions are indicated by underlining and deletions are indicated by strikeouts or double bracketing.

1. (Currently amended) A ~~DNA-PK inhibitor~~ compound having a formula



or a pharmaceutically acceptable salt thereof,

wherein m is an integer 0 through 3;

~~n is an integer 0 through 4;~~

X is O, S(O)<sub>0-2</sub>, or NR<sup>a</sup>;

Z, independently, is CR<sup>b</sup> or N;

~~A is heteroaryl or a four- to seven-membered aliphatic ring containing 0, 1, 2, or 3 heteroatoms independently selected from the group consisting of N, O, and S;~~

R<sup>1</sup>, independently, is selected from the group consisting of halo, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, N(R<sup>d</sup>)<sub>2</sub>, OR<sup>d</sup>, carboxy, wherein the carboxy is not carboxyl, nitro, OC<sub>1-3</sub>alkyleneN(R<sup>d</sup>)<sub>2</sub>, N(R<sup>d</sup>)-C<sub>1-3</sub>alkyleneN(R<sup>d</sup>)<sub>2</sub>, OC<sub>1-3</sub>alkyleneC(=O)OR<sup>d</sup>, O(C<sub>1-3</sub>alkylene)OP(=O)(OR<sup>d</sup>)<sub>2</sub>, O(C<sub>1-3</sub>alkylene)OP(=O)(ONa)<sub>2</sub>, OP(=O)-(OR<sup>d</sup>)<sub>2</sub>, OP(=O)(ONa)<sub>2</sub>, cyano, aldehyde, carboxamide, thiocarboxamide, acyl, mercapto, sulfonyl, trifluoromethyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl; or

two R<sup>1</sup> groups are taken together with the atoms to which each is attached to form a 5-, 6-, or 7-membered ring, wherein 1 or 2 carbon atoms of R<sup>1</sup> optionally is a heteroatom selected from the group consisting of O, N, and S, said ring optionally substituted with one or more =O, =S, =NH, OR<sup>e</sup>, OR<sup>d</sup>, N(R<sup>d</sup>)<sub>2</sub>, carboxyl, carboxy, alkyl,

aryl, substituted aryl, heteroaryl, or substituted heterocaryl, said heteroatom optionally substituted with a group selected from the group consisting of aryl, substituted aryl, alkyl, substituted alkyl, and acyl;

$R^2$ , ~~independently, is selected from the group consisting of~~  $OR^d$ , halo,  $N(R^d)_2$ , aldehyde, alkyl, substituted alkyl, acyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl,  $C_{1-3}$ alkylene $OR^d$ ,  $C(=O)N(R^d)_2$ ,  $N(R^d)_2$ ,  $C(=O)OR^d$ ,  $NO_2$ ,  $NR^dC(=O)R^d$ ,  $NR^d(SO_2)R^d$ ,  $OC_{1-3}$ alkylene $OR^d$ ,  $OC_{1-3}$ alkylene $OC_{1-3}$ alkylene $R^d$ ,  $OC(=O)R^d$ ,  $OC_{1-3}$ alkylene $C(=O)C_{1-3}$ alkylene $R^d$ , and  $(SO_3)R^d$ ;

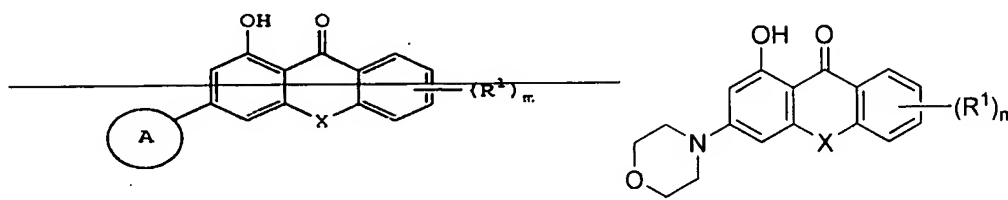
$R^a$  is selected from the group consisting of hydro,  $C_{1-4}$ alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl,  $C_{1-3}$ alkylenearyl,  $C_{1-3}$ alkyleneheteroaryl,  $C_{1-3}$ alkyleneheterocycloalkyl,  $C_{1-4}$ alkylene- $N(R^d)_2$ ,  $C_{1-4}$ alkylene $OR^d$ ,  $C_{1-4}$ alkylene $C(=O)OR^d$ ,  $C(=O)R^d$ ,  $C(=O)N(R^d)_2$ ,  $C(=O)OR^d$ ,  $C(=O)SR^d$ ,  $C(=S)N(R^d)_2$ ,  $SO_2R^d$ ,  $SO_2N(R^d)_2$ ,  $C(=O)NR^dC_{1-4}$ alkylene $OR^d$ ,  $C(=O)NR^dC_{1-4}$ alkyleneheterocycloalkyl,  $C(=O)C_{1-4}$ alkylenearyl,  $C(=O)C_{1-4}$ alkyleneheteroaryl,  $C_{1-4}$ alkylene $C(=O)C_{1-4}$ alkylenearyl,  $C_{1-4}$ alkylene $C(=O)C_{1-4}$ alkyleneheteroaryl,  $C_{1-4}$ alkylene- $C(=O)$  heterocycloalkyl,  $C_{1-4}$ alkylene $NR^dC(=O)R^d$ ,  $C_{1-4}$ alkylene $OC_{1-4}$ alkylene $OR^d$ ,  $C_{1-4}$ alkylene $OC_{1-4}$ alkylene $C(=O)OR^d$ , and  $C_{1-4}$ alkylene $C(=O)N(R^d)_2$ ;

$R^b$ , independently, is selected from the group consisting of hydro, alkyl, halo, aldehyde,  $OR^d$ ,  $O(C_{1-3}$ alkylene) $OP(=O)(OR^d)_2$ ,  $O(C_{1-3}$ alkylene) $OP(=O)(ONa)_2$ ,  $OP(=O)(OR^d)_2$ ,  $OP(=O)(ONa)_2$ , nitro,  $N(R^d)_2$ , carboxyl, carboxy, sulfonamido, sulfamyl, and sulfo; and

$R^d$ , independently, is selected from the group consisting of hydro, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl,  $C_{1-3}$ alkylenearyl, substituted aryl, heteroaryl, and substituted heteroaryl.

2-8. (Canceled)

9. (Currently amended) The ~~inhibitor~~ compound of claim 1 having a structure



or a pharmaceutically acceptable salt thereof.

10-21. (Canceled)

22. (Currently amended) ~~A DNA PK inhibitor~~ The compound of claim 1 selected from the group consisting of:

~~1-hydroxy-3-morpholin-4-yl-xanthen-9-one;~~

~~1-hydroxy-6-methoxy-3-morpholin-4-yl-xanthen-9-one;~~

~~6-fluoro-1-hydroxy-3-morpholin-4-yl-xanthen-9-one;~~

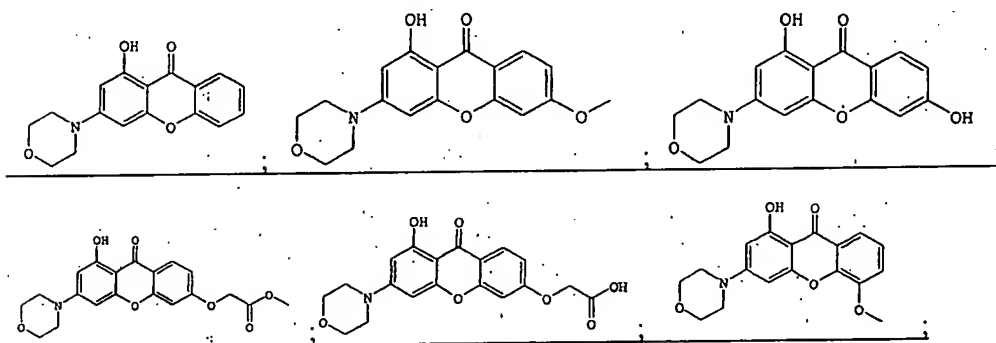
~~1-hydroxy-6-(4-methylpiperazin-1-yl)-3-morpholin-4-yl-xanthen-9-one;~~

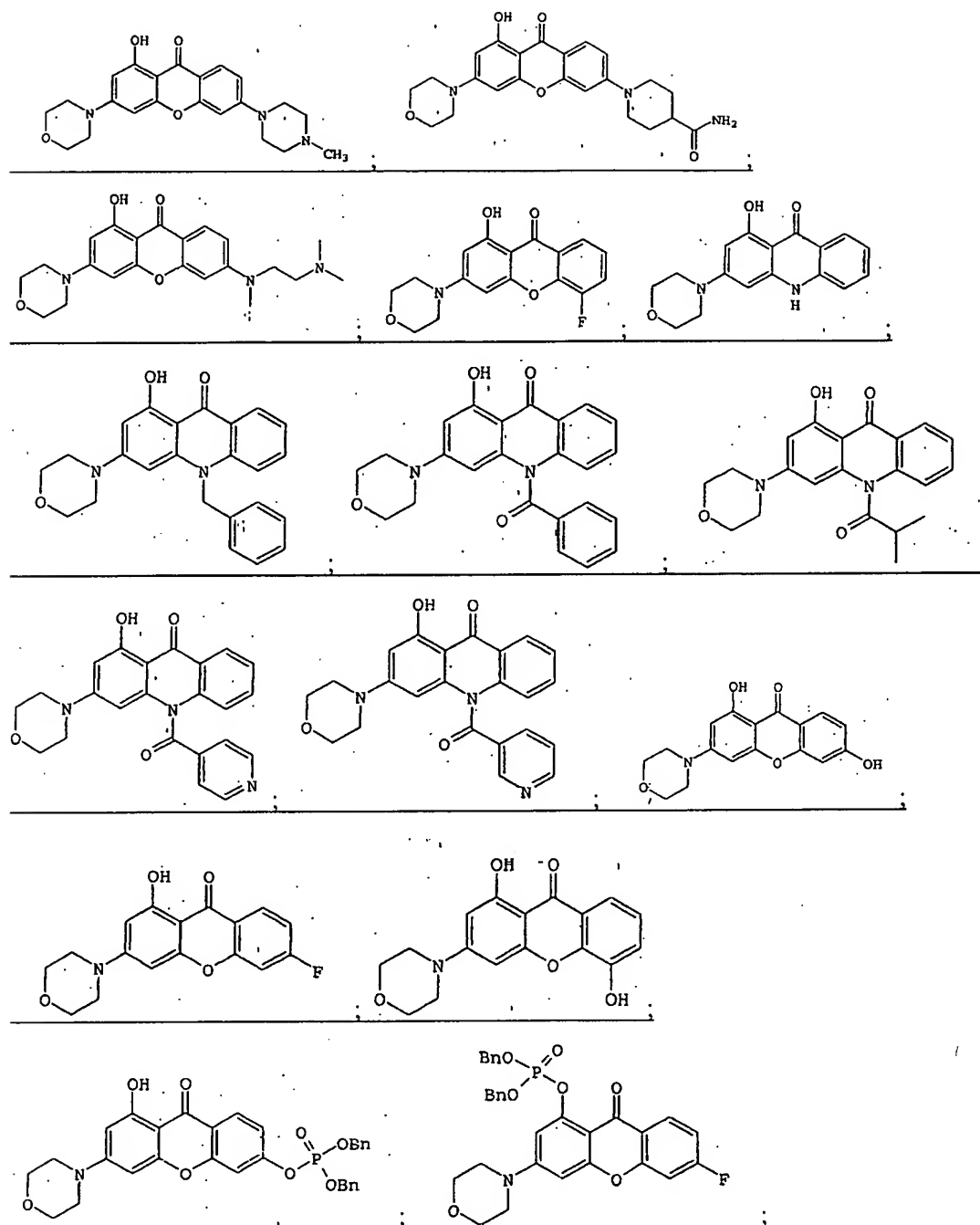
~~1-(8-hydroxy-6-morpholin-4-yl-9-oxo-9H-xanthen-3-yl)-piperidine-4-carboxylic acid-amide;~~

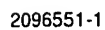
~~trifluoromethanesulfonic acid 1-hydroxy-9-oxo-9,10-dihydro-acridin-3-yl ester;~~

and

~~1-hydroxy-3-morpholin-4-yl-10H-acridi-9-one.~~

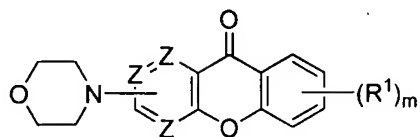






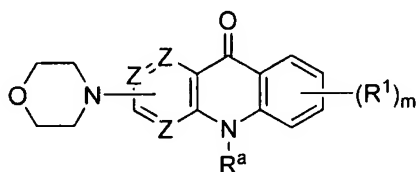
23.-53. (Cancelled)

54. (New) The compound of claim 1 having a structure



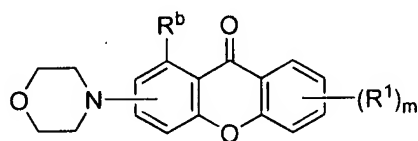
or a pharmaceutically acceptable salt thereof.

55. (New) The compound of claim 1 having a structure



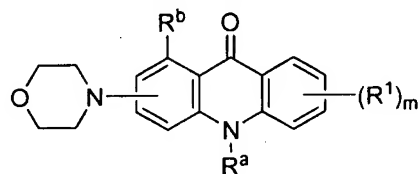
or a pharmaceutically acceptable salt thereof.

56. (New) The compound of claim 1 having a structure



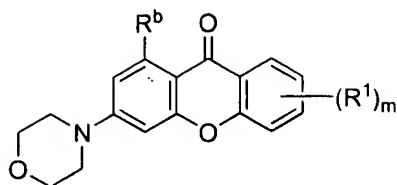
or a pharmaceutically acceptable salt thereof.

57. (New) The compound of claim 1 having a structure



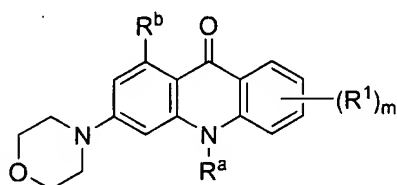
or a pharmaceutically acceptable salt thereof.

58. (New) The compound of claim 1 having a structure



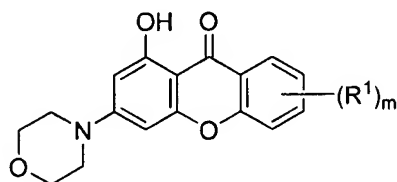
or a pharmaceutically acceptable salt thereof.

59. (New) The compound of claim 1 having a structure



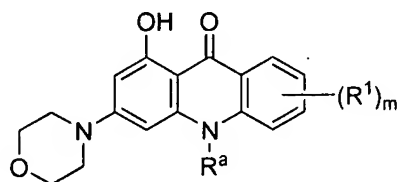
or a pharmaceutically acceptable salt thereof.

60. (New) The compound of claim 1 having a structure



or a pharmaceutically acceptable salt thereof.

61. (New) The compound of claim 1 having a structure



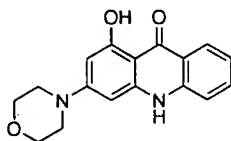
or a pharmaceutically acceptable salt thereof.

62. (New) The compound of any one of claims 1, 9, and 54-61, wherein  $m$  is 0; or a pharmaceutically acceptable salt thereof.

63. (New) The compound of any one of claims 1, 9, and 54-61, wherein m is 1; or a pharmaceutically acceptable salt thereof.

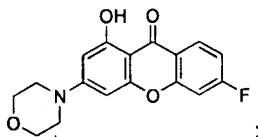
64. (New) The compound of any one of claims 1, 9, and 54-61, wherein m is 2; or a pharmaceutically acceptable salt thereof.

65. (New) The compound of claim 22, wherein the formula is



or a pharmaceutically acceptable salt thereof.

66. (New) The compound of claim 22, wherein the formula is



or a pharmaceutically acceptable salt thereof.

67. (New) A pharmaceutical composition comprising (a) a compound of any one of claims 1, 9, 22, and 54-61, 65, and 66 and (b) a pharmaceutically acceptable carrier or diluent.

68. (New) A pharmaceutical composition comprising (a) a compound of any one of claims 1, 9, 22, and 54-61, 65, and 66 and (b) an antineoplastic agent.